

The lesser florican

Text and photographs by Ravi Sankaran

Close to sunset, the sun finally broke through the cloudy skies. It had been tiring looking for floricans through most of a rainy afternoon. Splashing through a narrow stream, still muddy after the recent rains, I walked up the low ridge in front of me. Florican! A hundred metres away, on the opposite ridge, a male florican stood looking around with an air of barely suppressed energy and excitement. Seemingly conscious of his looks, the florican ran his beak through the feathers of his glossy black neck and belly. While the plumes on his head waved in the gentle breeze, he shuffled his feet impatiently as he surveyed the mosaic of emerging green around him. Then abruptly with a flash of white and a sharp carrying rattle, the florican fluttered off the ground before dropping back to the spot he took off from. With an amusingly cocky air, he did that endearing jump twice more, before hurrying away into the fast descending dusk.

Oblivious of the cold rain that followed, I made my way back to the forest nursery that night, my thoughts centred on the elegantly comical lesser florican. I could only look forward, with absolute pleasure, to the idea of having to study and understand the ways of the lesser florican over the subsequent months.

The lesser florican is the smallest of our three resident bustards. About the size of a trim village hen, the lesser florican, like its cousins, the famous great Indian bustard and the elusive Bengal florican, is a bird of open grasslands. However, unlike its cousins, the lesser florican has separate wintering and breeding grounds. The monsoon being their season of love, the floricans migrate to certain parts of Gujarat, Rajasthan and Madhya Pradesh where, with adequate protection, apparently barren stretches of land are soon transformed into vibrant grasslands.

Having had the dubious distinction of being one of the finest 'table' birds, floricans in the

past were indiscriminately hunted. This coupled with drastic changes in their habitat in the wake of the human population explosion, makes them endangered birds today. Considering the gravity of the situation, the Bombay Natural History Society as a part of its Endangered Species Project, started a five-year project in 1984, to study the ecology, behaviour and status of these birds. The Project is financed by the United States Fish and Wildlife Service released through the Government of India. With the invaluable support of the Madhya Pradesh Forest Department, we set up our first research station at Sailana, north of Ratlam, to study the breeding behaviour of the lesser florican.

The Naulakha grassland at Sailana is ideal florican country. Having had some amount of forest cover, the area was once the shooting preserve of the Maharaja of Sailana. The mammals have long gone and so have the trees, leaving behind pure grassland habitat. With the changes through time the grassland is now owned by agriculturists from the surrounding villages. The 250-hectare grassland is today a florican sanctuary.

Typical of Central India, the Naulakha grassland, an oasis among vast tracts of agriculture and grazing lands, has a gently undulating landscape. The valleys between the ridges channel rain-water streams into three small reservoirs.

Usually placid as they bubble and gurgle over their stony paths, the streams are rapidly converted into muddy and foaming rivulets after a spell of torrential rainfall; only to revert back to clear innocuous streams in sunny weather. This area, initially devoid of any vegetation but for scattered *Butea* bushes, with good rainfall soon has grass close to a metre tall. Vigilantly protected from grazing, this grassland is harvested by November for its valuable hay.

Signs of the monsoon were everywhere. Neatly ploughed fields hid, in their brown

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palms, seeds awaiting more of that life-giving water. Turned green by the emerging grasses, the rejuvenation of life was evident all around. The monsoon was on time; I was a few days late. In the distance I heard the calls of painted partridges as they echoed challenges at each other. I was sure that the floricans would have arrived and was right, for I soon flushed out a male.

Their breeding requirements being intrinsically related to the south-west monsoon, the lesser florican moves with the monsoon winds. So much so that early arrivals appear 'magically'

within the grassland after the first heavy showers. Over the next month or so there are more and more arrivals into the grassland with every spell of heavy rain. In a year of poor monsoon, very few floricans are to be seen, the majority having moved into areas where the rainfall has been more copious.

The attraction display of the male lesser florican is well adapted to its grassland habitat. In the form of an aerial display, the florican jumps to about a metre over the grass, flashing the white on its wings, accompanied by a loud rattle that can be heard upto 500 metres away. While descending, it breaks its fall to the spot of take-off, with partially open wings. Accomplishing a jump in about a second, this makes the florican a difficult quarry for even the swiftest aerial predator, yet announcing its presence to all the females and males around it. Preferring to jump in the morning and evening, a florican will display right through the day under cloudy conditions. At the peak of its breeding season, a male florican will jump *over four hundred times* a day, trampling bare oval patches in the ground at favoured jumping spots.

This attraction display, though ideally suited to its natural needs, unfortunately hangs over the florican like the sword of Damocles. Aided by the repeated sharp rattles and the flashing white, shikaris with guns have been known to wipe out most of the male floricans in a grassland, during one morning shoot. Not to be outdone, trappers, on finding a jumping spot, are assured of yet another bird to hang on their sticks.

Amusingly competitive, two floricans will try and outdo each other in the number and intensity of their jumps. Each time one jumped, it would, on landing, turn to face its nearest rival as if to say, "Let's see you do better." If a female florican were to fly overhead, the males positively lose their self-control. Like jacks-in-the-box gone hysterical they jump rapidly up and down, barely pausing between

The shy and secretive female lesser florican, in contrast to the flashily-coloured male, is a quiet beauty. Cryptic-coloured, an overall fawn-to-buff, she is covered on top with delicate vermiculations. Into a shallow scrape amongst the grass, she usually lays three to four, olive-green eggs, that she incubates and rears all on her own.



Bustards: an overview

Bustards are an ancient group of birds belonging to the family *Otididae*. A varied family, it has 22 species in 8 genera, 5 of which are represented by a single species each (including the lesser and Bengal florican). Where they fit in relation to other birds is unclear. Modern taxonomists place them in *Gruiformes* along with cranes (*Gruidae*) and rails (*Rallidae*), but it was believed at one time that they were closer to game birds, even ostriches. Bustards have their origin in Africa (still the home of many and the centre of divergence). Present-day distributions cover Europe, Asia and Australia; the Americas have no representative either today or in fossil records.

Medium-sized to very large terrestrial birds, bustards as a rule inhabit open country and semi-desert regions of the world, having amongst them the heaviest flying birds—large male great bustards may reach 18 kg. and the great Indian bustard upto 15 kg. Typically they have short bills, long slender necks, stout bodies with short tails carried horizontally on fairly long legs with only three toes on the feet. Bustards maintain their plumage, which is a friable material called 'powder down', aided by dust bathing, as they lack both a crop and a preen gland. Males are generally larger than females though in the case of the lesser and Bengal floricans, the opposite is true. Possessing a more showy plumage than the female, ornamentation in the male includes crests, moustaches, plumes and the ability to swell the neck.

Preferring to walk rather than fly, bustards are nonetheless strong fliers and are capable of bursts of speed. Most species undergo local movement and some are definitely migratory. The houbara bustard, for instance, migrates from its breeding grounds in the U.S.S.R. and winters in the semi-arid and arid regions of north-west India, Pakistan and other Middle East countries; the lesser florican migrates into Gujarat and adjacent parts of Rajasthan and

Madhya Pradesh, during the monsoon, to breed and then spreads out over the rest of the country, the majority appearing to move into Southern India. The great Indian bustard is a resident bird subject mainly to local movements.

The males of most bustard species perform spectacular attraction displays, which serve to attract females and to announce to rival males the possession of territory. Highly varied, male displays range from a balloon type display, as in the great Indian and kori bustards, where the neck is distended into a pouch and loud booming calls are emitted, to a running type of display as in the case of the houbara, at the peak of which it reveals a white fan of breast feathers. The lesser florican and little bustards have a jumping type of display, which has been extended into a sort of display flight in the Bengal florican, the height of the jump being largely dependent on the surrounding vegetation. This type of display has been exaggerated in some African species, like the red-crested and black-bellied bustards, whose aerial displays involve circling above the trees in their savannah homelands.

Due to their specific requirements, bustards are highly vulnerable to environmental changes. Changing crop patterns, increased grazing pressures and the ever-present hunting fraternity have all led to a serious decline in populations. Local extinction has already occurred, as in the case of the great bustard from U.K., and due to the fragmentation of their habitat they have become rare in their former ranges (the Bengal florican is today absent from most of the Indian terai). Though protected by the law in many countries, bustards like the houbara are still relentlessly pursued for sport. Sadly, in our country, most conservation efforts are diverted to forests and 'glamorous' mammals, while a great number of spectacular and unique birds are being steadily relegated to oblivion.

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jumps, each desperately trying to attract her into his territory before slowing down to a more sedate frequency once she has passed.

At the forest rest-house, I lie on the bed, mesmerised by the drops of water gathering ominously in joints in the ceiling, before dropping onto the floor. In the night they begin to drip on me, and as I huddle under my raincoat, wet and miserable, I wonder why I couldn't have chosen a more comfortable profession. But at dawn the fresh chill morning air, the sounds of an awakening grassland and the familiar display rattles of the florican, wipe out any desire in me to return to civilisation.

Sitting atop a pump house, I watched a male florican through a telescope as it foraged across crop fields and along grassy bunds. Still early in the season, the maize had only just sprouted. Close by, an Indian roller tried to dispute a perch with a red-headed merlin. Just as the florican crossed a bund, it stopped abruptly. Ahead was another male. Bristling with indignation, the first chased the other, that hurried away. For a while the chase continued, a distance of about 25 metres being maintained between them, as first one then the other would stop to snap up an insect that it had flushed, only to resume running away or continuing the pursuit. After a while the aggressor went his way probably feeling that the other had got the message.

A pugnaciously territorial bird, the male lesser florican cannot tolerate the presence of another male close to it. While 'chases' occur frequently, vicious fights break out when two seemingly equally matched birds come into contact. Assuming ritualistic threat postures by cocking their tails and raising their mantle feathers, they circle and with a flurry of wings rush at each other. Actual combats do not last long, for as soon as one is pushed down it signals the end of the fight. Antagonistic behaviour is seen mostly at the time when territories are being formed and 'borders' are being contested. Once the territories have

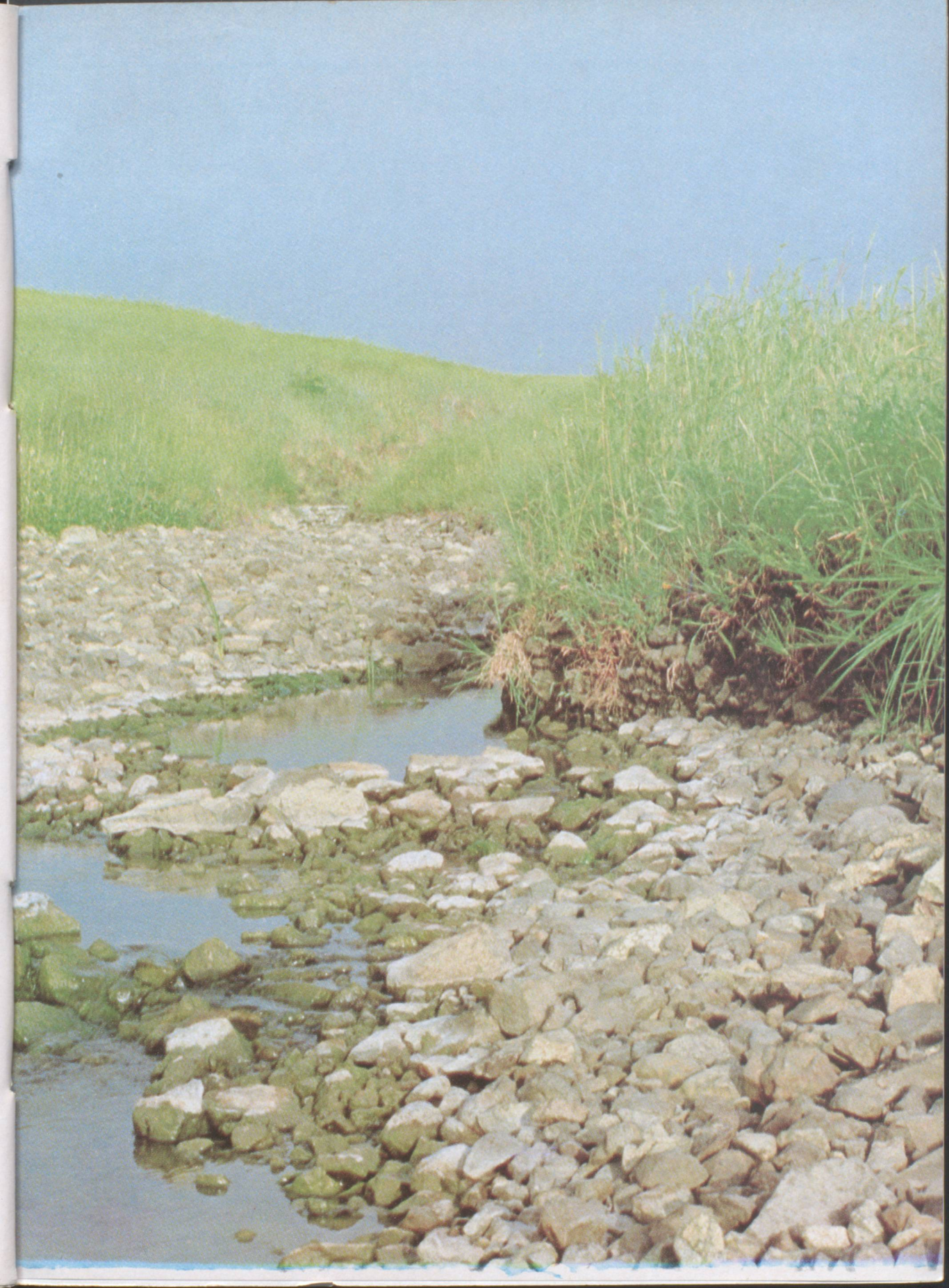
been settled, the males usually remain close to their jumping spots.

By end August, the grassland is alive with a myriad calls. At dawn, the first sound that greets me is the enquiring 'wheech', 'wheech' of the rain quails, echoed further away by more of their kind. A painted partridge with its ventriloquist abilities calls gustily from a prominent mound. Within the grass, hordes of insects go about their daily chores; grasshoppers chirp from blades of leaves while dung beetles are busy at a jumping spot, rolling away bits of florican droppings. In the distance, a pair of sarus cranes trumpets and pirouettes with the sheer joy of

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The Naulakha grassland at Sailana (**facing page**) is ideal florican country, where the gently undulating landscape is broken up into a number of small streams. Usually placid, these streams gurgle over their stony paths, during the rains being converted into muddy foaming rivulets. Hordes of insects like the hooded grasshopper (**top**) go about their daily chores amongst the grass, insects being possibly an important food item for lesser floricans, besides grain. A co-inhabitant of the florican's habitat, an alert cobra (**above**) rears its head.



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being together. Skylarks sing as they circle overhead; I flush a crested lark on its nest, nestled beneath a stone. A circling whistling teal and a split-second change of partners and I know where they have got their nest. Harriers float effortlessly above the grass, their keen eyes raking the vegetation below for any juicy morsel, and large grey babblers carry on a noisy conversation on an overhead wire. A rustle in the grass and I feel my hair prickle as a cobra moves swiftly away. At dusk the amphibian orchestra begins, a spotted owl occasionally adding a shrill chatter to it. For some, a day had ended; for others it had only just begun.

An accomplished avian Casanova, the male lesser florican has a curious display which he performs in the presence of a female. Head outstretched, his neck feathers fluffed up and plumes thrown over his head, a male florican will chase any female that comes into his vicinity. On reaching her, he pauses and jerks his head back to rest almost against his

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mantle. He then looks towards her, his neck, chin and head feathers still raised, before repeating the entire sequence. Though I haven't seen floricans actually mate, this courtship display appears to be pre-copulatory behaviour. On one occasion, early in the monsoon, I watched a male chase a female florican in this manner for over an hour across sprouting maize fields. His love spurned and finally realising it, he slept off his passion on a grassy bund as the female wandered away, apparently in search of food.


While the lesser florican is less shy than the other bustards I have become acquainted with, the size and nature of its habitat and terrain make it a difficult subject to study. Shy and wary, the bird hides at the least sign of danger. Often, a florican that I have been following for a few hours has suddenly vanished from sight when my attention was diverted for a few minutes, only to reappear a long way off. When they arrive in the grassland, observations are relatively easy. But with the subsequent alternating rain and sun, the rapidly-growing grass begins to conceal more and more of the bird. Finally, only a black speck or a display jump discloses the location of the male; the female florican is virtually impossible to locate. Once the breeding season is over, the male florican discards his bright, showy garb and assumes the cryptic colouration of the female, only retaining more white on the wings.

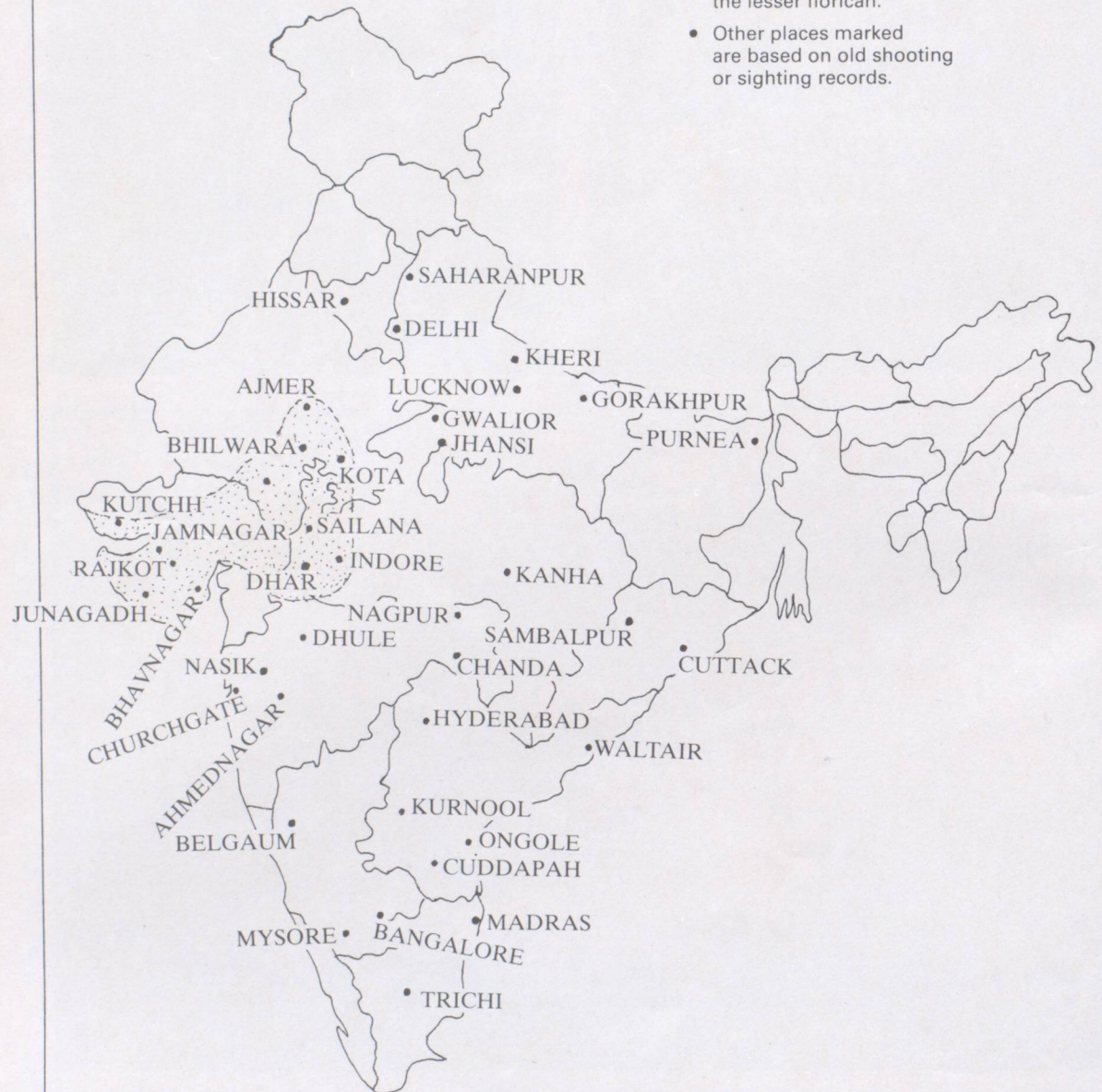
In the monsoon of '86 when my guide and mentor, Dr. Asad Rahmani, better known for his studies on the great Indian bustard, came to Sailana, we surveyed all the nearby grasslands. At the end of a week when we tallied the scores, we came up with 49 male floricans. However, this relatively large number in a small area did in no way make us complacent about the status of the florican. We knew that Gujarat, the major portion of the florican breeding range, was experiencing a severe drought and that florican enthusiasts there had hardly seen any



The attraction display of the male lesser florican (**top left, top right and above**) is a spectacular one. The bird may jump a metre high over the grass, flashing the white on its wings, accompanied by a loud rattle, audible upto 500 metres away. Accomplishing a jump in a second, it announces its presence to all female and male lesser floricans. Preferring to jump in the mornings or evenings, under cloudy conditions a bird may display all day long, at the peak of its breeding season, a male bird will jump *over 400 times a day*, trampling bare, oval patches in the grass at favoured jumping spots.

COVER STORY

-  Present known breeding range of the lesser florican.
 • Other places marked are based on old shooting or sighting records.



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birds. Obviously, most of the birds were in the Madhya Pradesh part of their breeding range, where the monsoon was very much better.

In contrast to the flashily-coloured male, the hen florican is beautiful in her own quiet way. Cryptic-coloured, her overall fawn-to-buff colouration is covered on the top with delicate vermiculations. More shy and secretive than the male, the hen florican rears her young all on her own. Being a promiscuous species the only role that the male florican plays in procreation is to woo any female that fancies him.

The hen florican lays her clutch of three to four, olive-green eggs in a shallow scrape in the ground, in grass that is tall enough to conceal them and her. Being a close sitter, an incubating hen is flushed only when almost trod upon. When news came to me of a nest containing two eggs, my elation knew no bounds. I was able to keep a watch on that nest and calculate the incubation period. Those few short hours that I spent in a hide watching the hen were as memorable as they were intimate. Early on the 22nd day of incubation, the chicks hatched, within a few hours of each other. On their drying, the hen led her precocial chicks into the tall ripening grass, calling them with reassuring croons, the chicks wheezily peeping as they followed her.

There are still numerous aspects of the lesser florican that baffle us. Basic things such as their sex ratio and their longevity are as yet uncertain. Relationships between the mother and chicks and how long they remain together are still unknown. One big mystery about floricans is where they go once their breeding season is over and what they do there. We have as yet only theories and conjectures based on older writings, but given time, the answers to these questions may still be found.

With a ripened grassland, the season finally comes to an end. The floricans

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have disappeared as mysteriously as they had appeared. That last evening, I sat on top of the ruins of the Maharaja's hunting lodge, drinking in the last rays of a sun setting beyond a golden-brown grassland. As the sky glowed with changing colours, a multitude of questions filled my mind. How long before these few grasslands are brought under the plough or churned to barrenness beneath hordes of starving livestock? Why must we persist in obviously outdated methods of farming our cattle? Would it not be more economical and productive to stall-feed our cattle, letting our overgrazed lands revert back to enormous grasslands that will provide sufficient fodder for our livestock and serve to boost our pitifully poor milk output? Thereby giving a new lease of life both to one of India's most spectacular birds—the lesser florican—and also all the other creatures that inhabit a grassland. □